

Chapter 8

Displacing Humans, Reconfiguring Darwin in Contemporary Culture and Theory

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A Tale of Two Darwins

The frightening thing about Darwin is not nature red in tooth and claw. The frightening thing about Darwin is not our ancestors the apes. The frightening thing about Darwin is what my mother called chaos. I realise that there is some specific scientific meaning to the word *chaos*. But I think that my mother's meaning is more profound: there is no plan, there never was one. Everyone knows this. It is a cliché of modernism. Everyone knows this now. But Darwin knew it first. And Darwin knew it best. (Schine 1998: 177)

Recapitulating a part of Charles Darwin's voyage to the Galapagos Islands in search of her own past (or 'evolution', a term that significantly replaces non-biological designations such as 'story' or 'history' in recent biographical fictions),¹ the narrator of Cathleen Schine's novel *The Evolution of Jane* (1998) expresses the cultural shift that has occurred since Darwin's lifetime: from being a controversial and 'frightening' thinker, the eminent Victorian has become a central figure not only in present-day debates across various disciplines, from biology to cognitive linguistics and psychology, but in popular culture as well. One aspect effectively sidelined in the early stages of Darwin's reception, his rejection of divine design, that is, of teleology, is so widely accepted today that it can indeed be called 'a cliché of (post)modernism'. In fact, in 2009 – the bicentenary of his birth and the hundred-fiftieth anniversary of the publication of *On the Origin of Species* – Darwin was celebrated like a pop star. Conferences, new biographies, scholarly monographs and special editions of academic journals (for instance, *Victorian Studies*), while very extensive in number, were no more than could be expected in view of the relevance of Darwin's work. However, the popular hype of things Darwinian we have been experiencing since 2009 goes far beyond these established academic rituals. There have been countless exhibitions, festivals and interactive

¹ A topical example for this generic trend is Benjamin Hale's *The Evolution of Bruno Littlemore* (2011), a narrative told by a chimp become human, which draws extensively on Darwinian patterns.

media events.² Undoubtedly, the interest in evolution theory has spread far beyond a scholarly context. This is, of course, also true about the immediate impact of Darwinism. After the publication of *On the Origin of Species* in 1859, Darwin's ideas were popularized in various non-scientific media, for example in numerous caricatures. What interests me here, however, is the sudden upsurge, after a long period of relative neglect, of general interest in Darwin after the last turn of the century, for which the bicentenary celebrations are a symptom rather than a cause.

The Natural History Museum, London, launched the celebrations with an exhibition on Darwin's 'Big Idea', inviting visitors to 'discover the man and the revolutionary theory that changed our understanding of the world' ('Visiting the Darwin Centre'). Exhibits ranged from 'fantastic fossils' that had inspired Darwin on the voyage of the *Beagle* to a first edition of the *Origin*. Other events had a similarly popular appeal. The HMS *Beagle* Project planned to rebuild a modernized seagoing replica of the ship on which Darwin circumnavigated the globe, and to restage the voyage: 'International friendships and scientific alliances will form, and people the world over will follow the voyage, adventure and science aboard through the *Beagle*'s interactive website' ('*Beagle*'). The University of Cambridge, Charles Darwin's *alma mater*, presented a festival (5–10 July 2009), featuring not only Darwin scholars, historians of science and scientists, but also poets and writers of fiction. The programme included lectures, debates, musical performances, film viewings and street theatre, as well as a major exhibition at the Fitzwilliam Museum. As the festival website put it, 'there was something for everyone' ('Darwin 2009 – A Festival'). The experience of the 'Darwin Year', this mixture of academic tourism, shared celebrations and professional marketing, has been neatly captured by George Levine: 'I have emerged from the bicentenary celebrations with about six Darwin-related t-shirts, a Darwin sweat shirt, several Darwin dolls and pens, three Darwin caps, and a Darwin bumper sticker' (Levine 2006: v). To which I could add my own modest trophies, a fridge magnet with Darwin's 'I think' diagram and a *Beagle* bookmark.

How has Darwin, the recluse of Down House, turned into an object of – however high-brow – merchandising? Why does he still have to offer 'something for everyone'? Put differently, what is Darwin's cultural function in the present? Why have his works gradually acquired a cultural value and urgency that is about to eclipse other important thinkers such as Marx, Nietzsche and Freud?

As the passage from Cathleen Schine's novel quoted above shows, the popular reception of Darwin's evolution theory has always been connected to fear.³ Schine's protagonist Jane Barlow Schwartz identifies three Darwinian topoi that have continued to evoke anxiety: a view of nature that is not harmonious and

² See the introduction of this volume for a review of activities in the context of the bicentenary celebrations.

³ See my analysis of 'anthropological anxiety' in the wake of Darwin's evolution theory in *Literature after Darwin* (2011).

benign, but, in Lord Tennyson's phrase, 'red in tooth and claw';⁴ the genealogical connection of all organisms including the human animal; and, most frightening of all, contingency, the a-teleological, unpredictable structure of natural selection. Peter J. Bowler has shown that contingency has been ignored in the early reception of evolution theory, although it constitutes a crucial aspect of Darwin's theory; hence, Bowler speaks of the 'non-Darwinian' revolution.⁵ I would like to suggest that these three features are still central to contemporary perceptions of Darwinism, but their cultural meanings, and hence their value for the production of belief – of shared interpretations of our world – have changed. To take the most obvious example: while Darwin's suggestion that man is 'the co-descendant with other mammals of some unknown and lower form' (Darwin 1998: 152) was repulsive to his Victorian readers; today we are quite comfortable with the assertion that we share about 98 percent of our DNA with the chimpanzees. Publications that refer to the 'human animal' and call *Homo sapiens* 'the third chimpanzee' are bestsellers (such as Jared Diamond's *The Third Chimpanzee: The Evolution and Future of the Human Animal*). Revulsion has changed into acceptance and even fascination. Nevertheless, the trope of the 'ape ancestor' that is simultaneously the 'ape within' of modern man continues to be used to invoke negative qualities considered to be the – unchangeable – results of evolution: behaviour patterns such as violence, rape, war and general 'savageness'.

This ambivalent revalorization, I claim, is equally valid for the other Darwinian topoi. In contemporary Western liberal culture, the belief in a clock-like ordered nature, prevalent in Darwin's youth and singled out for explicit rejection in *On the Origin of Species*, has been widely replaced by a view of nature as a complex, unstable system, the future of which is contingent upon a multitude of small, unpredictable events. Considering Darwin's ubiquity one might think that order and teleology have largely disappeared from our views of nature;⁶ however, as will be discussed below, some media representations and scholarly positions based on evolutionary psychology continue to adhere to the idea of a biologically determined human nature. Conversely, the insecurity resulting from the widespread acceptance of contingency may still be scary, but simultaneously it has become a point of anchorage for popular representations of (human) nature as well as for critical theory that highlights contingency as a positive, dynamic force, because of its very indeterminacy. An example for the latter interpretation of Darwinism

⁴ Tennyson, *In Memoriam*, Canto 56. See Schine 1998: 177–8.

⁵ See Bowler 1975, 1983, 1992.

⁶ This, obviously, is a sweeping claim that, like all such generalizations, is only partly true. Within religious discourse, we can find both appropriations of Darwinism that attempt to reconcile it with Christian faith (including the idea of a caring Creator and a final goal of creation, namely the perfectibility of humankind), and fundamentalist rejections of evolution theory. Neither the vast literature in this field nor the publications of the 'anti-religious camp', represented first and foremost by Richard Dawkins and Daniel Dennett, can be considered here. For a balanced assessment of the issues at stake, see Bowler 2007.

is Elizabeth Grosz's *The Nick of Time* (2004), a study of variation, transformation and temporality. For Grosz, evolution constitutes a force of openness and difference that can be aligned with radical (for example, feminist) politics. Nature and culture, the body and the mind thus no longer stand in opposition, '[b]iological organization, whose morphological structures engender the variety of life in all its forms, instead of ensuring that life conforms to existing social categories, boundaries, and limits, instead of containing existence to what is or has been, opens up and enables cultural, political, economic, and artistic variation' (Grosz 2004: 1).

A very different take, namely an adherence to evolutionary determinism, is pursued under the heading of 'literary Darwinism'. While also taking the continuity of nature and culture, and the formative influence of evolution as their premise, the proponents of this school of thought focus on the *result* rather than the *process* of evolutionary adaptation. In consequence, the human mind and human cultural practices are considered as, to a large degree, determined by long-term evolutionary processes: 'innate human dispositions exercise a powerful shaping force on all forms of cultural order' (Carroll 2004: 23). This does not utterly preclude cultural variation, as the leading theorist of this approach, Joseph Carroll, emphasizes: 'cultural forms are themselves the product of a complex interaction among various innate dispositions and between innate dispositions and variable environmental conditions' (2004: 23). However, this is a far cry from the scary yet productive 'chaos' of Darwinism. Here, Darwinian contingency – defined by Grosz as 'endless openness to the accidental, the random, the unexpected' (Grosz 2004: 7) – has been domesticated. In Carroll's and Grosz's readings, we get two irreconcilably different Darwins.⁷

Darwin stands at the centre of such intellectual debates and continues to engage the popular imagination for a number of reasons. By his contemporaries, he was regarded as a destroyer of established truths, but also as someone who opened vast new vistas of scientific inquiry. This contradictory reception – oscillating between fear and hope, between chaos and a new order, between the destruction of a *grand récit* and the offer of a new one – continues to inform the views of Darwinism in the present. Darwin raised questions that are still topical, and that crucially affect human self-perception as well as our conceptions of the world. Is there a continuum or a divide between nature and culture? What are anthropological givens, what are cultural constructions? In how far does evolution determine human behaviour? What is the status and function of human artefacts such as art and literature? How would a Darwinian framework restructure academic research not only in disciplines such as socio-biology, evolutionary development, anthropology and primatology, but in the humanities? And what exactly do we mean if we invoke such a Darwinian framework?

I suggest that there is more than one 'Darwin' – maybe not just two but, in the words of Stevenson's Dr Jekyll, a whole 'polity' (Stevenson 2003: 48) – and that it

⁷ I will return to this discussion in the third part of my essay.

is precisely the richness, indeterminacy and even contradictoriness of his texts that makes Darwin and his work such a productive starting point for interpretations and theories within and without academia. But it is not only the intellectual and scholarly level on which Darwin is stimulating. His popular appeal is only explicable in terms of the affect of his work. But the affective response is as wide-ranging as the intellectual one, as I can only briefly indicate here by mentioning two titles in which Darwin's name is invoked. In the documentary *Darwin's Nightmare* (2004), the filmmaker Hubert Sauper describes the introduction of the Nile Perch into Lake Victoria, which led to the subsequent extinction of indigenous fish species in the lake. The international traffic with Victoria Perch, soon to become one of the most popular kinds of fish on European dinner tables, in turn has financed the traffic in weapons in the countries adjoining Lake Victoria. War, famine and prostitution appear as more or less direct consequences of the human intervention in the lake's ecosystem. Sauper offers a view of nature and culture as an 'entangled bank', in Darwin's term, a story in which the extinction taking place in the depth of the lake is mirrored by the human brutality on its shores. These events have *per se* nothing to do with Darwin. However, the title is well-chosen because it allows audiences to activate one of the available Darwinian frameworks, the semantic cluster of extinction, the war of nature and ecological connectivity. Because the film is framed in such a way, the events described acquire a wider resonance. From being a documentary about a particular time and place, a particular human conflict and a particular kind of fish, the story becomes part of a larger pattern, a metaphor for the condition shared by humans and animals.

My second example is George Levine's recent book *Darwin Loves You* (2006), whose title has been inspired by a bumper sticker bearing these three words in an ironic subversion of the even more popular 'Jesus Loves You'. Needless to say, the Darwin constructed here is vastly different from the one in *Darwin's Nightmare*. Defending Darwinism from the charges of a mechanistic and intrinsically amoral world-view and of 'sanctioning ... the worst of dog-eat-dog capitalism' (Levine 2006: ix) – or, one might add, fish-eat-fish capitalism – Levine proposes a 'kinder, gentler Darwin' (Levin 2006: 202), a theorist of non-theistic enchantment. In the famous last passage of *On the Origins of Species* in which the author describes the 'entangled bank' bordering a country lane, Darwin sees more in nature than 'a Struggle for Life', 'the war of nature' and 'famine and death' (Darwin 1860: 490). He sees the richness and interdependence of an ecological system, 'with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth' (Darwin 1860: 490), humble yet complex organisms that allow him to see a larger picture and to react with a sense of wonder:

There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved. (Darwin 1860: 490)

This is not stark and meaningless chaos. The sense of wonder at a beautiful world in which death is very present but in a sense has lost its sting, the enchantment evoked in this sentence, produces a powerful affect whether it is theistic (with the phrase 'by the Creator' inserted in the second edition), or non-theistic, without God, as in the first edition. As Levine comments:

In the intensity of his engagement with the natural world, Darwin offered one of the very richest compensations for the imperfections, cruelties, and indifferences that his studies seemed so often to reveal. Reading his work with care, one will find ... that far from proposing a world that mechanistically functions without spirit or moral compass, Darwin's writing belongs to a great tradition of romantic literature and thinking that imagines nature, with all its obvious horrors, as essentially benevolent and altruistic – quite the reverse of what many modern uses of 'natural selection' describe. ... Darwin's world, while it points always toward that naturalistic explanation, pushes frequently also toward the sublime, toward that dizzying vision of endless time, of staggering complexity, of interdependence and paradox, that replaces the 'enchantment' that a divinely constructed nature has been said to produce. (Levine 2006: 41)

I propose that both Darwins, the benign one constructed in *Darwin Loves You* as well as the bleak one in *Darwin's Nightmare*, have a certain justification, a foundation in his own texts. As various studies on the reception of Darwinism show, most recently the collection edited by Eve-Marie Engels on the ethical and epistemological impact of Darwin (2009), Darwinism has always been open to the most diverse responses across different disciplines and ideological positions. Which Darwin we need, and which Darwin we like, is highly dependent on our various strategic position-takings and intellectual commitments. I will return to this question regarding my own discipline, literary studies, in the final part of my paper. But first I take a look at yet another of the topoi enumerated by Schine's Jane Barlow Schwartz, a particular Darwinian configuration which was highly resonant for the Victorians and continues to haunt contemporary debates: the encounter between humans and apes, and the recognition of their similarity.

The Darwinian Mirror Stage

Famously, the debates following the publication of *On the Origin of Species* focused on Darwin's 'monkey theory', as the descent of all primates from a common ancestor was inaccurately but popularly referred to. Before Darwin, the dual nature of humankind was largely undisputed. Through his body, man was linked to the world of animals, so that Linnaeus, for example, could include the species *Homo sapiens* in the order Primates on anatomical grounds, together with such interesting species as *Homo nocturnus*, today better known as the orangutan (*Pongo pygmaeus* and *Pongo abelii*).⁸ Even if Linnaeus's taxonomy was not

⁸ On the history of the classification of great apes, see Corbey 2001, esp. 164–5.

undisputed, it was not fundamentally problematical since the other and more important part of the human being, his mental and spiritual side, was clearly not a part of nature, but God's gift to his favoured creature. This comfortable division was shattered by Darwin's claim of common descent and his inclusion of the higher human faculties in the process of natural selection. In a radical break with Western philosophical tradition, Darwin proposed a monistic view of the human animal.⁹

Collectively, Darwin's contemporaries recoiled from evolution by natural selection. The 'anxiety of simianation' (Bernstein 2001), of 'going ape', proliferated both in general debates and in fictional writings. However, the sheer abundance of visual and textual material stressing the *similarity* between apes and humans – novels, caricatures and practices such as the highly popular ape tea parties at zoological gardens – suggests that the Victorians were not only shocked but also amused and fascinated by the 'monkey theory'.¹⁰

Obviously, this caricature is not terribly threatening. Rather, it is funny, irreverent and subtly erotic. An ape-like Darwin and a coy Victorian chimp lady are sketched against a tropical idyll, their gestures following the conventions of the depiction of lovers. Together, they are gazing into a small hand-held mirror. What is going on in the triangular exchange between the male human gaze, the female simian gaze and the mirror, the symbol of truth and of vanity? Is Darwin wooing the chimp lady, trying to seduce her by an appeal to her charming face? Is he instructing her about simian-human genealogy by pointing out the similarities between their features? Or is Darwin admiring his own magnificent cranium, the sign of human superiority despite his ape-like body? Is the connection between Darwin and the ape the familial relationship between cousins, the didactic relationship between teacher and pupil, or the desire pulsating between lovers? We cannot tell, because the reflection in the mirror is hidden from the viewer. I suggest that this mirror scene points us to a central configuration within Darwinian discourse. A human being gazing into a mirror and discerning the features of an ape, or looking at an ape and suddenly recognizing, as if in a mirror, himself, experiences anagnorisis, the moment of recognition we know from Greek tragedy, for example when Oedipus realizes that he himself is the murderer of King Laios whom he is seeking.¹¹ The shock of recognition is a constitutive moment in the human-ape encounter; however, the effect of anagnorisis is deeply ambivalent,

⁹ Prior to Darwin's theory, particularly its elaboration in *The Descent of Man*, only very few European philosophers argued for a naturalistic explanation of human mental powers, most notably Julien Offray de la Mettrie in *L'homme machine* (1748).

¹⁰ For an analysis of visual representations of Darwinism including caricatures and book illustrations, see Janet Browne, 'Constructing Darwinism in Literary Culture' (2005). See also the exhibition catalogues edited by Donald and Munro (2009), and Kort and Hollein (2009).

¹¹ For an elaboration of anagnorisis in fiction on animals, see Gerhard Neumann, 'Der Blick des Anderen' (1996).

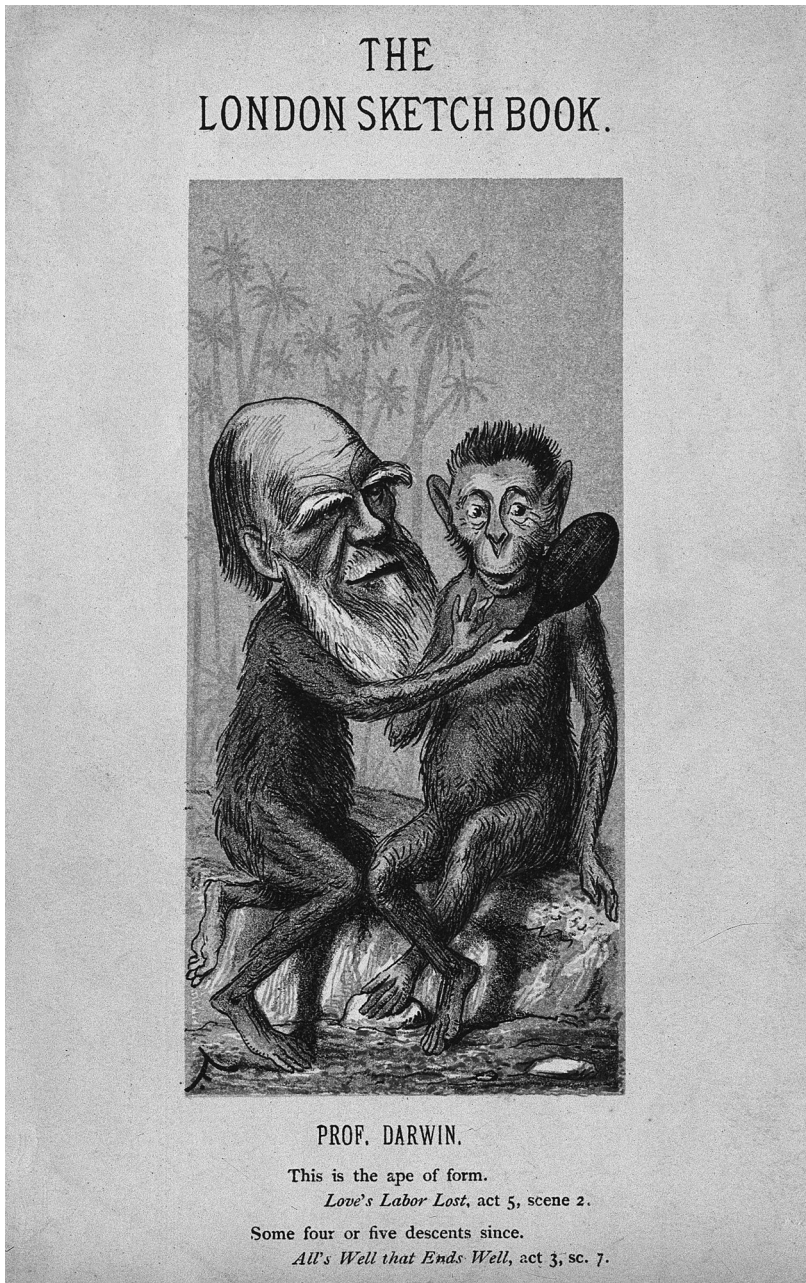


Fig. 8.1

Artist unknown, 'Prof. Darwin', *The London Sketchbook*, 1874.
 Reproduced with permission from Wellcome Library, London.

resulting either in a denial of identification or an all-too-eager over-identification with the simian other. I argue that a crucial difference between the Victorian and the contemporary response to Darwinism consists precisely in our stance toward anagnorisis, a shift from disavowal to embracing our simian heritage.

Mirror scenes between humans and apes proliferated in the fiction of the last decades of the nineteenth and the first decades of the twentieth century, reflecting both anthropological anxiety – the insecurity about human ontology after Darwin's intervention – and a desire for knowledge, equally connected to the Darwinian revolution and directed precisely at the human status that had become deeply ambivalent. The imagined encounter between humans and apes, or humans and their ape-like ancestors, is described as a shattering recognition of the animality of human nature and consequently, the subversion of the received world order. In Arthur Conan Doyle's adventure novel *The Lost World* (1912), on an isolated South American plateau British explorers meet various groups of inhabitants arrested at different points of evolutionary development: Jurassic dinosaurs, primitive Indians and anthropomorphic ape-men, the missing links postulated by Ernst Haeckel. Only the last group are perceived as dangerous because of their simultaneous familiarity and strangeness, their fusion of humanity and animality. The narrator, journalist Edward Malone, describes his first encounter with one of these creatures as uncanny in the Freudian sense – as shocking because he can recognize his own human identity in the repulsive features of the other:

A face was gazing into mine – at the distance of only a foot or two. The creature that owned it had been crouching behind the parasite, and had looked round it at the same instant that I did. It was a human face – or at least it was far more human than any monkey's that I have ever seen. It was long, whitish, and blotched with pimples, the nose flattened, and the lower jaw projecting, with a bristle of coarse whiskers round the chin. The eyes, which were under thick and heavy brows, were bestial and ferocious, and as it opened its mouth to snarl what sounded like a curse at me I observed that it had curved, sharp canine teeth. For an instant I read hatred and menace in the evil eyes. Then, as quick as a flash, came an expression of overpowering fear. There was a crash of broken boughs as it dived wildly down into the tangle of green. I caught a glimpse of a hairy body like that of a reddish pig, and then it was gone amid a swirl of leaves and branches. (Conan Doyle 1912: 117)

We can imagine that this play of emotions, from spontaneous disgust and hatred to fear, is reciprocated by the ape-man who is looking at a human face for the first time. The mutual recognition is reinforced in the encounters that follow. The category confusion produced by the similarity between humans and anthropoids is so threatening to both groups that a genocidal war erupts, resulting, naturally, in the triumph of *Homo sapiens* and the extinction of the ape-men.

A similar feeling of threat and disgust at the confrontation with the simian mirror image is expressed by Thomas Henry Huxley. In this case, however, the physical revulsion is superseded by an intellectual upheaval, which, albeit threatening at first, is the first step towards the pursuit of a deeper, daring knowledge about human nature:

Brought face to face with these blurred copies of himself [i.e. apes], the least thoughtful of men is conscious of a certain shock, due perhaps, not so much to disgust at the aspect of what looks like an insulting caricature, as to the awakening of a sudden and profound mistrust of time-honoured theories and strongly-rooted prejudices regarding his own position in nature, and his relations to the under-world of life; while that which remains a dim suspicion for the unthinking, becomes a vast argument, fraught with the deepest consequences, for all who are acquainted with the recent progress of the anatomical and physiological sciences. (Huxley 1863: 59)

This idea of uncovering a hidden truth, however unpleasant it may be, is the final constitutive element of the trope of the simian mirror. The human being looking at himself in the mirror and seeing the insulting caricature of an ape, or looking at an ape and recognizing with a sense of shock his own face, is at the same time an explorer embarking on the discovery of a new continent of knowledge, conducting a vast argument which distinguishes the thinking from the unthinking. Despite Darwin's inclusion of the higher intellectual capacities into the workings of natural selection, Huxley succeeds in salvaging the human intellect from the Darwinian humiliation. Huxley's reading of Darwin implies a heroic success story in which upwardly mobile *Homo sapiens* has worked his way up from his very humble beginnings in primordial slime to his current position as the king on the hill, an animal, yes, but a thinking animal towering above all others. In this way, Huxley contributes to the containment of the most subversive aspect of Darwinism, the contingency of natural selection and consequently, of human supremacy.

The Darwinian mirror scene partly reinforces Huxley's heroic revision of evolution theory, but more often than not undermines it by referring the human observer to the materiality underlying his identity construction, and consequently his mortality. In Jacques Lacan's account of human identity formation, the mirror is constitutive of the transition from a fragmented body image to an experience, or rather illusion, of wholeness. Intriguingly, Lacan begins his essay on the mirror stage with a reference to apes. While human infants are fascinated by the discovery of their reflection in the mirror, young apes according to Lacan fail to make the connection between their real and their represented selves (Lacan 1980: 1). The infant's identification with his mirror image implies that the human subject is divided between his physical body (which cannot be perceived by his own eyes as a totality) and the reflection in the mirror, which alone can supply a sense of completeness, called by Lacan the 'jubilant assumption of his specular image by the child' (Lacan 1980: 2). Consequently, human identity is built on a division between the physical entity and the cultural construction of wholeness, whereas the ape, who finds the mirror image 'empty' (Lacan 1980: 1), is at one with itself. If the mirror is replaced by the 'insulting caricature' of the ape (Huxley 1863: 59), throwing back the anamorphic distortion of the human figure, the illusion of wholeness and identity is shattered. In the caricature shown above, Darwin can see either his own reassuringly human face or the subtly disquieting reflection of the friendly, intelligent and yet uncanny chimp lady, depending on how the mirror is tilted. What is interesting about this illustration is precisely its dynamic



Fig. 8.2 Markus Roost, Untitled, *Die Zeit*, No. 44, 22 October 2009. Reproduced with permission from the artist.

and shifting quality, which it shares with many other visual representations of the human-ape encounter.

Is the configuration I have been describing so far historically specific to the immediate aftermath of Darwin's evolution theory? In other words, are these exclusively Victorian fears that have become obsolete today? After all, we are happy to acknowledge our genetic closeness to the great apes, or to admit that apes use and even make tools, live in socially complex groups and have an effective system of communication, or the fact that apes have a form of cultural memory and even produce art, as the primatologist Frans de Waal tells us (de Waal 2001: 30–1 and 174–5) – in short, that the difference between humans and other animals is, as Charles Darwin claimed, only a matter of degree and not of kind. What was deeply shocking to Darwin's first readers has become a generally acknowledged truth. Significantly, however, the trope of the mirror in which the human beholder suddenly sees his own simian features has survived. Interestingly, this human-ape anagnorisis is still staged as a shock.

This sudden apparition of man's true nature is certainly more frightening than Darwin's flirtation with the chimp. The photomontage accompanied an article about the origins of evil that appeared in 2009 in the German weekly *Die Zeit*. In both the illustration and the article, it is striking how stable certain rhetorical elements have remained. As in the writings of Darwin, Huxley and Victorian anthropologists and novelists, a face-to-face encounter is presented that allows us to catch a glimpse of the past. What we see in this magic mirror is, once again, the insulting caricature of the ape, here in the shape of a gorilla who functions as a representative of brute force and evil, despite Dian Fossey's efforts to reconstruct this species' image as 'gentle giants'. This is King Kong in the bathroom. In

addition, the article reproduces a conflation of three entities that is also familiar from Victorian anthropological texts or even from Sigmund Freud's *Totem and Taboo*: the rhetorical superimposition of the ape, prehistoric man and contemporary 'primitive' societies, suggesting that human behaviour, in particular in its more unpleasant aspects, is inherited and therefore predetermined and unchangeable:

Research like that conducted by Lucerne ethnologist Jürg Helbling shocks us also because we perceive in the archaic behaviour of tribal peoples as if it were our own past, and we are confronted with the fact that our ancestors also committed murder, rapine and plunder. And we get the feeling that as we look at primitive peoples we get to see something primeval, something frightening that is older than our civilisation, stronger perhaps than our own present moral code – something that for centuries has been termed 'evil'. (Schmitt 2009: 37, my translation)¹²

I will leave aside the obvious critique of this description of the so-called *Naturvölker* as living outside history and outside culture. As the article implies, the modern anthropologist, discovering humankind's violent past preserved in the 'archaic behaviour' of our less fortunate contemporaries in the jungle, is as 'frightened' as his Victorian ancestor contemplating the genealogical links between apes and humans. The rhetoric employed here – both on the visual and the textual level – draws on a tradition that is as old as Darwinian evolution theory itself. However, one could ask, why is this tradition still alive? And are its implications really still the same? At this point, we have returned to my initial question about the cultural function of Darwinism in the present.

Darwin in the Humanities: Seeking our Inner Ape

Although Darwin barely mentioned humankind in *On the Origin of Species*, the question of human nature has always been perceived as the central issue of Darwinism. However, the answer it has to offer is far from unequivocal. Anthropological models based on Darwinism can either stress the unfinishedness of evolution, its continuing dynamics, or conversely the slowness of adaptive processes that is tantamount to a standstill. The view adhered to in the *Zeit* article and in many other publications is that human nature is practically unchanging, frozen in a moment that is long past. It is not so much the tribal community that is 'prehistoric' as rather our own modern society: human behaviour today is

¹² 'Forschungsarbeiten wie [die des Luzerner Ethnologen Jürg Helbling] erschüttern uns auch, weil wir im archaischen Verhalten der Stammesvölker gleichsam unsere eigene Vergangenheit erblicken und damit konfrontiert werden, dass auch unsere Vorfahren einst mordend, raubend und brennend ihr Unwesen trieben. Und es beschleicht uns die Ahnung, dass wir beim Blick auf Naturvölker etwas Urzeitliches zu sehen bekommen, etwas Erschreckendes, das älter ist als unsere Zivilisation, stärker möglicherweise als unsere gegenwärtige Moral – etwas, für das seit Jahrhunderten der Begriff des 'Bösen' geprägt wurde.' (Schmitt 2009: 37)

allegedly still driven by genetic adaptations acquired in the palaeolithic age as, for example, the editors of *The Adapted Mind* maintain: 'the evolved structure of the human mind is adapted to the way of life of Pleistocene hunter-gatherers, and not necessarily to our modern circumstances'.¹³

By extension, cultural activities are frequently placed within an evolutionary framework in a way that stresses trans-historical universalism rather than the historical and cultural specificity of human practices – which, in fact, are not even uniquely human any longer. Frans de Waal argues that possibly 'our artistic impulse is ancient, antedating modern humanity, and perhaps even our species' (de Waal 2011: 152), and goes on to give a number of examples of painting apes and dogs enjoying classical music, an anecdotal procedure that resembles Darwin's own in *The Descent of Man*.¹⁴ This claim of a human-animal and culture-nature continuum and the naturalist position more generally have found a response in some recent approaches in literary studies that look at the anthropological and evolutionary foundations of literature. The presupposition of approaches such as 'literary Darwinism' (Carroll 2004) is that innate human dispositions – the product of natural selection – influence to a high degree all cultural activities, even if they do not determine them completely. The 'Darwinian paradigm' – or this particular interpretation of it – is regarded as normative. Positions that do not fit in, such as post-structuralist constructivism, are rejected as incoherent, empirically unfounded and plainly misguided (Carroll 2004: 23–5). Valid questions to be asked by literary scholars are, according to Carroll, 'what is [the] species-typical or universal structure [of the adapted mind], and what bearing does it have on literary representation?' (124). The result of such questioning, for example with regard to *Pride and Prejudice*, could be that '[t]he protagonists satisfy normative sociobiological expectations' (Carroll 2004: 134), namely: 'Strong men of high status gain sexual access to young and beautiful females' (Carroll 2004: 132). This may be true – but then, Mr. Collins who surely is an exemplar bound for extinction gains 'sexual access' to Elizabeth Bennet's best friend Charlotte Lucas, highlighting, if anything, the predominance of cultural and socioeconomic factors over the biological – but surely it is a very impoverished interpretation of Austen's novel. In addition, this type of research question focuses exclusively on the normative functions of literature to the detriment of its critical, socially subversive and aesthetically singular aspects.

In fact, Carroll is not interested in hermeneutic approaches that lead to a better understanding of individual works. He advocates an empirical methodology in which works of fiction are just a means to an end. His method of preference is quantitative analysis directed at reader psychology and, to a lesser extent, author psychology:

¹³ Barkow, Cosmides and Tooby 1992: 5. The caveman trope according to which gendered behaviour in particular continues to be determined by Pleistocene adaptation has been widely popularized; see McCaughey 2007.

¹⁴ On the evolutionary emergence of the aesthetic sense, see the argument recently put forward by Winfried Menninghaus (10 and passim).

Could we, for instance, take the opening chapter of Jane Austen's novel *Pride and Prejudice*, have an experimental subject read it while under a scanning machine, and find out something about the way comedy actually alters the brain? By correlating the responses of individual people with other data on the same people – psychological and social profiles, for example – and by comparing such correlations across individuals and groups of individuals, we could begin to formulate precise empirical propositions about the conditions under which audience response varies. (Carroll 2004: 38)

Given the necessary technology, we could. I leave open the question whether we should. If we do, we leave behind one academic discipline, literary criticism, and enter another, cognitive psychology or the sociology of literature.

Despite its obvious limitations – at least from the point of view of 'traditional' literary studies – literary Darwinism, together with other naturalist approaches such as cognitive poetics and linguistics, positions itself at present very successfully, albeit controversially, in the field of theory formation within the humanities.¹⁵ What is the appeal of such approaches? Partly, the naturalist or materialist or cognitive turn has to do with a growing dissatisfaction with the premises and methodology of cultural constructivism. Such unease has been expressed for example by Catherine Belsey, a prominent representative of post-structuralist theory who surely cannot be suspected of a naïve return to human nature as a foundational category. But according to Belsey, it is culture that now has become foundational, and therefore limiting, in critical theory: 'A thoroughgoing attribution of primacy to ideas, to the cultural script, has installed a new kind of tyranny' (Belsey 2005: xi). Concomitantly, there is a growing interest in methodology, on the one hand in traditional philological methods and textual criticism, on the other hand in empirical psychological and sociological methods based on large amounts of data – in both cases, approaches invested with the hope of providing a more secure footing for literary studies.

In this context, literary Darwinism claims a closer observance of the scientific ideal, of *Wissenschaftlichkeit* as opposed to the often more associative hermeneutic methods common in the humanities. If, however, the axiomatic assumption that nature is the foundation for all cultural activity leads to the conclusion that all literary texts reflect this unvarying nature – that all novels are about sexual selection – then the aesthetic distinctiveness and historicity of literature is completely lost. Moreover, literary Darwinism commits a methodological fallacy of its own when it regards the interest the humanities have in historicism and cultural construction as flawed:

There is human knowledge that accumulates and there is human knowledge that has to be constantly negotiated anew. Literary scientism in this situation fails to

¹⁵ The *Journal of Literary Theory* has been running a series of articles on literary Darwinism, empirical methodology and related topics since 2007. The full texts can be accessed online under the heading 'Controversy' (<http://www.jltonline.de/index.php/articles>). *Critical Inquiry* has repeatedly printed contributions on Darwinism and the humanities, see for example Gross 2010.

understand or acknowledge the methodological aim and status of hermeneutic approaches to literature. It is not a *deficit* of these approaches that they ask particularistic questions; it is their explicit way of searching for models of understanding that are appropriate to the peculiarities of their object. (Kelleter 2007: 171, emphasis in original)

A further problem of literary Darwinism is that it presupposes a very rigid Darwinian framework: it assumes a human nature that suffers from arrested development. This paradigm is thus caught up in the trope of the mirror that always reflects one and the same, primeval image of human nature – a kind of Dorian Gray theory of evolution. Not only does this approach ignore the historical, cultural and individual specificities of literary texts, it also misunderstands its own epistemological foundation, namely Darwinian evolution theory. The sadly misnamed literary Darwinism looks for predictable patterns, whereas a constitutive moment of Darwin's Darwinism is the unpredictable variation, the uncontrollable event, the contingent new form.

As Gillian Beer has emphasized, Darwin's theory is far from privileging normativity. Perpetual change, not the endless repetition of the same universal pattern, governs the evolutionary process. At a point in history when human bodies are subjected to enormous processes of standardization, we can and should rediscover Darwin's idea 'that diversity, difference, nonconformity, otherness, are creative forms – diversity is *the* creative medium and abundance of difference essential to survival' (Beer 1998: 26f., emphasis in original). And it is not only difference and diversity that are crucial here, but – it bears repeating – the unpredictability of these processes of change: 'New characters appear more or less at random and are whittled down by a merciless struggle for existence to leave only those with survival value. This is evolution by trial and error, not by design' (Bowler 2007: 80). This, again, is Cathleen Schine's 'chaos': scary, because the future is uncertain, and at the same time liberating and productive – because the future is uncertain.

In this sense, Darwinism has been deployed by the feminist theorist Elizabeth Grosz. The fact that past events set the terms for, but do not control the future means that individuals just as well as populations are always in a state of emergence: rather than being predetermined by a residual 'inner ape', human beings constitute and modify their identities performatively, by actualizing directions latent in their respective culture. The concept of the 'event' is crucial for Grosz's theoretical exploration of Darwinism:

Darwin brings the concept of the *event* to the sciences. Events are ruptures, nicks, which flow from causal connections in the past but which, in their unique combinations and consequences, generate unpredictability and effect sometimes subtle but wide-ranging, unforeseeable transformations in the present and future. Events erupt onto the systems which aim to contain them, inciting change, upheaval, and asystematicity into their order. (Grosz 2004: 8)

Since Jurij Lotman's seminal study *The Structure of the Artistic Text* (1977), the event plays an important role in literary and particularly in narrative analysis. Drawing on Lotman, Mieke Bal stresses the transformative character of the event within a plot structure: 'an event is a process, an alteration' (Bal 1997: 182). Events, one could say, correspond to the 'random variations' of evolution: they are surprising twists, modifications, new departures within established generic patterns. Without such patterns, events would be meaningless; without events, however, genres would lose their creative, transformative potential. Critical engagements with literary texts should pay heed to both: the pattern as well as the event. A methodologically sound and historically sensitive reading of Austen's *Pride and Prejudice* therefore has to take into account both the nonconformist event – Elizabeth's flagrant break with conventions when she rejects not one but two marriage proposals – and the normative generic pattern from which it deviates and to which it ultimately returns. In my view, a cultural theory based on a reading of Darwinism that foregrounds the event – and with it, processes of transformation, difference and unpredictability – does better service to the humanities, and literary studies in particular, than a theory that ignores the human potential for change as well as historicity and cultural diversity – a theory caught up in the search for the ape that is still lurking within us all.

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